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Claim Amendment

1. (Original) An oven intake for a gas chromatographic (GC) oven, comprising:

an intake duct having a convergent geometry to accommodate a small oven, the intake duct having one or more intake fans that supply airflow to the GC oven, wherein the airflow originates from the one or more intake fans and flows through the intake duct into the GC oven; and

one or more cross-sheets positioned inside the intake duct parallel to a direction of the airflow flowing into the GC oven, wherein the one or more cross-sheets reduce spin of the airflow originating from the one or more intake fans and help guide the airflow through the intake duct into the GC oven.

2. (Original) The oven intake of claim 1, wherein the intake duct has a non-uniform cross-section.

3. (Original) The oven intake of claim 1, wherein each of the one or more cross-sheets has a converging shape that conforms to the convergent geometry of the intake duct.

4. (Original) The oven intake of claim 1, wherein each of the one or more cross-sheets is secured to the intake duct by riveting one or more metal tabs.

5. (Original) The oven intake of claim 1, wherein the number of

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cross-sheets positioned inside the intake duct to guide the airflow through the intake duct is one of: two, three or four.

6. (Original) The oven intake of claim 1, wherein one cross-sheet is installed off center with respect to an axis of spin of the airflow to guide the airflow through the intake duct.

7. (Original) The oven intake of claim 1, wherein the one or more cross-sheets are positioned proximately to the one or more intake fans inside the intake duct.

8. (Original) The oven intake of claim 1, wherein the one or more intake fans are axial boxer fans located at one end of the intake duct.

9. (Original) The oven intake of claim 1, wherein the intake duct has a conical shape.

10. (Original) The oven intake of claim 1, wherein the one or more cross-sheets reduce frictional losses of the airflow flowing into the GC oven, introduce a larger volume of air to the GC oven, and reduce a cool-down time of the GC oven.

11. (Original) The oven intake of claim 1, wherein two cross-sheets are placed in an "=" configuration at one-third and two-thirds of a width of the intake duct.

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12. (Original) The oven intake of claim 1, wherein the spin of the airflow originates from a source other than the one or more intake fans.

13. (Original) A system for providing intake cross-sheets for a gas chromatographic (GC) oven, comprising:

an intake duct having a convergent section to accommodate the GC oven located at one end of the intake duct;

one or more intake fans located remotely from the GC oven at an opposite end of the intake duct, the one or more intake fans supplying airflow to the GC oven; and

one or more cross-sheets positioned inside the intake duct parallel to a direction of the airflow flowing into the GC oven, wherein the one or more cross-sheets reduce spin of the airflow originating from the one or more intake fans and reduce frictional losses of the airflow flowing into the GC oven.

14. (Original) The system of claim 13, wherein each of the one or more cross-sheets has a converging shape that approximates the convergent section of the intake duct.

15. (Original) The system of claim 13, wherein two cross-sheets are positioned inside the intake duct to guide the airflow through the intake duct.

16. (Original) The system of claim 13, wherein the one or more cross-sheets are positioned proximately to the one or more intake fans inside the intake duct.

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17. (Canceled) ~~A method for cooling an oven, comprising:~~

~~providing one or more cross-sheets inside an intake duct parallel to a direction of airflow flowing into the oven, wherein the intake duct has a convergent geometry to accommodate the oven and has one or more intake fans located remotely from the oven, and wherein the one or more intake fans supply airflow for the oven; and~~

~~enabling the one or more cross-sheets to reduce spin of the airflow originating from the one or more intake fans and reduce a cool-down time of the oven.~~

18. (Currently Amended) A~~The~~ method ~~of claim 17~~for cooling an oven, comprising:

providing one or more cross-sheets inside an intake duct parallel to a direction of airflow flowing into the oven, wherein the intake duct has a convergent geometry to accommodate the oven and has one or more intake fans located remotely from the oven, and wherein the one or more intake fans supply airflow for the oven; and

enabling the one or more cross-sheets to reduce spin of the airflow originating from the one or more intake fans and reduce a cool-down time of the oven, wherein each of the one or more cross-sheets has a converging shape that conforms to the convergent geometry of the intake duct.

19. (Currently Amended) The method of claim ~~17~~18, further comprising positioning two cross-sheets inside the intake duct to help guide the airflow through the intake duct.

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20. (Currently Amended) The method of claim ~~17~~18, further comprising positioning the one or more cross-sheets proximately to the one or more intake fans inside the intake duct.

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